CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 79-26

NPDES PERMIT NO. CA0006980

REISSUANCE OF WASTE DISCHARGE REQUIREMENTS FOR:

ARROWHEAD INDUSTRIAL WATER
SANTA CLARA, SANTA CLARA COUNTY

The California Regional Water Quality Control Board (hereinafter Board), San Francisco Bay Region, finds that:

1. Arrowhead Industrial Water (hereinafter discharger) submitted a report of waste discharge (NPDES Short Form C) dated February 14, 1979, for reissuance of its NPDES Permit. Arrowhead Industrial Water is the successor company to Aqua Media, Inc. Board Order No. 74-33, which expires April 16, 1979, currently prescribes waste discharge requirements for Aqua Media, Inc.

2. The discharger produces about 300,000 gallons per day (gpd) of high purity water using filtration, reverse osmosis, and demineralization processes, and discharges an average of 104,000 gpd of waste. The waste contains most of the dissolved and particulate matter removed from the intake water, and waste treatment includes filtration and pH adjustment. The waste is discharged into Calabazas Creek near the north end of Hubbard Avenue. The Creek is tributary to Guadalupe Slough which flows into San Francisco Bay, all waters of the United States, at a point near the mouth of Coyote Slough.

3. The Board adopted a Water Quality Control Plan for the San Francisco Bay Basin April 1975. The Basin Plan contains water quality objectives for tidal and non-tidal surface waters.

4. The beneficial uses of Calabazas Creek and contiguous waters are:

   a. Recreation
   b. Fish migration and habitat
   c. Habitat and resting for waterfowl and migratory birds
   d. Industrial water supply
   e. Esthetic enjoyment
   f. Navigation

5. Effluent limitation and toxic effluent standards established pursuant to Sections 208(b), 301, 304, and 307 of the Federal Water Pollution Control Act and amendments thereto are applicable to the discharges.

6. The reissuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000) of Division 13 of the Public Resources Code in accordance with Water Code Section 13389.

7. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the proposed discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

8. The Board in a public meeting heard and considered all comments pertaining to the discharge.

9. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, and shall take effect at the end of ten days from the date of hearing, provided the Regional Administrator has no objections.

IT IS HEREBY ORDERED, Arrowhead Industrial Water, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Federal Clean Water Act, and regulations and guidelines adopted thereunder shall comply with the following:

A. Effluent Limitations

1. The discharge of an effluent in excess of the following limits is prohibited:

Constituents	Units	30-day Average	Maximum Day
Settleable matter	ml/l-hr	0.1	0.2
Total suspended solids	lb/day(kg/day) mg/l	4.3(2.0) 5	8.6(4.0) 10
Turbidity	JTU	-	20
Temperature	^{o}F	-	100^{o}

2. The discharge shall not have a pH less than 6.5 nor greater than 8.5.

3. Any representative sample of waste as discharged shall meet the following limit of quality:

TOXICITY:

The survival of test fishes in 96 hour bioassays of the effluent shall achieve a median of 90% survival for three consecutive samples and a 90 percentile value of not less than 70% survival for 10 consecutive samples.

B. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State in any place:

   a. Visible, floating, suspended, or deposited oil or other products of petroleum origin.

   b. Floating, suspended, or deposited macroscopic particulate matter or foam.

   c. Bottom deposits or aquatic growths.

   d. Alteration of temperature, turbidity, or apparent color beyond present natural background levels.

   e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife and waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place:

   a. Dissolved oxygen — 5.0 mg/l, minimum
      Annual median — 80% saturation, minimum

      When natural factors cause lesser concentrations than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.

   b. Dissolved sulfide — 0.1 mg/l, maximum

   c. pH — Variation from natural ambient pH by more than 0.5 pH units.

3. This discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

C. Provisions

1. Neither the treatment nor the discharge of pollutants shall create a nuisance as defined in the California Water Code.

2. All drainage from the vicinity of storage facilities and piping for mineral acids and caustic shall be confined and transported for disposal in a class I disposal site, or otherwise excluded from the waste and from waters of the State.

3. This Order includes the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977 with the exception of Sections A.5, A.12, A.16, B.2, and B.5.

4. Order No. 74-33 is hereby rescinded effective April 1, 1979.

5. This Order expires on March 19, 1984 and the discharger must file a Report of Waste Discharge in accordance with Title 23, California Administrative Code, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

6. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this Board.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on March 20, 1979.

FRED H. DIERKER
Executive Officer

Attachments:
Standard Prov., Rept., Req., and Def. - 4/77
Self-Monitoring Program Specifications (A&B)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

REVISED

SELF-MONITORING PROGRAM
FOR

Arrowhead Industrial Water

Santa Clara, Santa Clara County

NPDES NO. CA 0006890

ORDER NO. 79-26

CONSISTS OF

PART A, dated January 1978

AND

PART B, ordered 5/21/74
Revised 3/29/79

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. EFFLUENT

Station	Description
E-1	At any point in the outfall from the treatment facilities between the point of discharge and the point at which all waste tributary to that outfall is present.

B. RECEIVING WATERS

Station	Description
C-1	At a point in Calabazas Creek, located 100 feet upstream from the point of discharge.
C-2-D	At a point in Calabazas Creek, located at the point of discharge.
C-3	At a point in Calabazas Creek, located 75 feet downstream from the point of discharge.
C-4	At a point in Calabazas Creek, located 200 feet downstream from the point of discharge.

II. SCHEDULE OF SAMPLING, ANALYSIS, AND OBSERVATIONS

A. The schedule of sampling, measurements and analysis shall be that given as Table I.

III. MODIFICATION OF PART "A", DATED 1/78

1. Does not include the following paragraphs of Part A:

C.3, C.4, C.5.a., C.5.c., C.5.d., C.5.e., D.1, D.3, D.4, E.2.b., E.2.c., E.3., E.4., F.1., F.2.

2. Includes the following modifications:

a. Paragraph F.3: Self-Monitoring Reports

Self-Monitoring Reports shall be submitted for each calendar quarter not later than the 15th of the month following.

b. Paragraph F.3.e: Effluent Data Summary

Your responsibilities under the Self-Monitoring Program will be fulfilled by filing with this Regional Board all documents specified in the program except EPA Form 3320-1. You do not need to file the Federal "Discharge Monitoring Report" (Form EPA 3320-1) with the EPA.

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 79-26.

2. Has been ordered by the Executive Officer on May 21, 1974; revised, and is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.

FRED H. DIERKER
Executive Officer

EFFECTIVE DATE March 29, 1979

TABLE I

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSES

SAMPLING STATIONS	E-1				C-1 thru C-4				
TYPE OF SAMPLES	C-24	G	Cont	O	G	O			
Flow Rate (mgd)			D						
pH (pH units)			CMR		M				
Settleable Matter (ml/l-hr)		M							
Total Suspended Solids (mg/l & lb/day)	M								
Toxicity (% survival after 96 hrs in undiluted waste)	Y								
Total Dissolved Solids	M				M				
Turbidity (Jackson Turbidity Units)	M								
Dissolved Oxygen (mg/l & % saturation)					M				
Temperature, ^{O}F		M			M				
Standard Observations				D		M			

Legend:
- C-24 = 24-hour composite sample
- G = grab sample
- Cont = continuous
- O = visual observation
- CMR = continuously measure & record
- D = daily
- M = monthly
- Y = annually